HRL132
PD#021109

METHOD AND APPARATUS FOR FAST ON-LINE AUTOMATIC SPEAKER/ENVIRONMENT ADAPTATION FOR SPEECH/SPEAKER RECOGNITION IN THE PRESENCE OF CHANGING ENVIRONMENTS

ABSTRACT

A fast on-line automatic speaker/environment adaptation suitable for speech/speaker recognition system, method and computer program product are presented. The system

5   comprises a computer system including a processor, a memory coupled with the processor, an input coupled with the processor for receiving acoustic signals, and an output coupled with the processor for outputting recognized words or sounds. The system includes a model-adaptation system and a recognition system, configured to accurately and efficiently recognize on-line distorted sounds or words spoken with

10   different accents, in the presence of randomly changing environmental conditions. The model-adaptation system quickly adapts standard acoustic training models, available on audio recognition systems, by incorporating distortion parameters representative of the changing environmental conditions or the speaker's accent. By adapting models already available to the new environment, the system does not need separate adaptation training

15   data.